

WHAT IS CLAIMED IS:

1. An unleaded EPA compliant gasoline pump fuel which provides total emissions no higher than those provided by fuels allowed under CARB regulations for Clean Burning Gasolines (CBG), Title 13 California Code of Regulations, Sections 2260 et seq., which has the following properties:

| | |
|----------------------|-----------|
| T ₁₀ , °F | < = 140 |
| T ₅₀ , °F | > 210 |
| T ₉₀ , °F | < 330 |
| RVP, psi | < = 7.0 |
| S, ppmw | < = 50 |
| Oxygen, wt% | 1.5 - 2.9 |
| Aromatics, vol% | < = 35 |
| Olefins, vol% | < = 10 |
| Benzene, vol% | < = 1.0 |
| Paraffins, vol% | < = 75 |
| API° | > = 59 |
| Octane, (R+M)/2 | > = 87 |

2. A fuel according to claim 1 which also possesses at least one of the following additional properties:

| | |
|----------------------|-----------|
| T ₅₀ , °F | 211 - 214 |
| T ₉₀ , °F | 305 - 320 |
| S, ppmw | < = 25 |
| Aromatics, vol% | 10 - 28 |
| Olefins, vol% | < = 6 |
| Octane (R+M)/2 | 92 - 93 |

3. A fuel according to claim 1 which possesses the following properties:

| | |
|----------------------|-----------|
| T ₅₀ , °F | 211 - 214 |
| T ₉₀ , °F | 305 - 320 |
| S, ppmw | < = 25 |
| Aromatics, vol% | 10 - 28 |
| Olefins, vol% | < = 6 |
| Octane (R+M)/2 | 92 - 93 |

4. A fuel according to claim 1 which also possesses at least one of
5 the following additional properties:

| | |
|----------------------|-----------|
| T ₅₀ , °F | 211 - 215 |
| T ₉₀ , °F | 305 - 325 |
| S, ppmw | < = 25 |
| Aromatics, vol% | 10 - 28 |
| Olefins, vol% | < = 6 |
| Octane (R+M)/2 | 86 - 87 |

5. A fuel according to claim 1 which possesses the following properties:

| | |
|----------------------|-----------|
| T ₅₀ , °F | 211 - 215 |
| T ₉₀ , °F | 305 - 325 |
| S, ppmw | < = 25 |
| Aromatics, vol% | 10 - 28 |
| Olefins, vol% | < = 6 |
| Octane (R+M)/2 | 86 - 87 |

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6. An unleaded EPA compliant gasoline pump fuel which provides total emissions no higher than those allowed under CARB regulations for Clean Burning Gasolines (CBG), Title 13 California Code of Regulations, Sections 2260 et seq., which has the following properties:

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| | |
|----------------------|---------------|
| T ₁₀ , °F | < = 140 |
| T ₅₀ , °F | > 215 = < 220 |
| T ₉₀ , °F | < 330 |
| RVP, psi | < = 7.0 |
| S, ppmw | < = 50 |
| Oxygen, wt% | < = 3.5 |
| Aromatics, vol% | < = 35 |
| Olefins, vol% | < = 10 |
| Benzene, vol% | < = 1.0 |
| Paraffins, vol. pct. | < = 75 |
| API° | > = 59 |
| RVP, psi | 6.6 - 7.0 |

7. A fuel according to claim 6 which has a RVP of 6.6 psi maximum.

8. A fuel according to claim 6 which has a T₅₀ of from 215°F to
10 218°F and a RVP of 6.6 to 6.9 psi.

9. A fuel according to claim 6 which also possesses at least one of the following properties:

| | |
|----------------------|-----------|
| T ₉₀ , °F | 315 - 330 |
| S, ppmw | < = 35 |
| Oxygen, wt% | < = 2 |

10. A fuel according to claim 6 which possesses the following properties:

| | |
|-----------------|------------|
| T_{10} , °F | ≤ 140 |
| T_{90} , °F | 315 - 330 |
| S, ppmw | ≤ 35 |
| Oxygen, wt% | ≤ 2 |
| Aromatics, vol% | ≤ 35 |
| Olefins, vol% | ≤ 10 |
| Benzene, vol% | ≤ 1.0 |
| Paraffins, vol% | ≤ 75 |
| API° | ≥ 59 |

11. A fuel according to claim 9 which has a T_{90} value from 315 to 325°F.

12. A fuel according to claim 9 which has an octane rating of 92 to 93 (R+M)/2 and an aromatics content of 12 to 20 percent and a benzene content of not more than 0.80 vol%.

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13. A fuel according to claim 9 which has an octane rating of 87 (R+M)/2 and an aromatics content of 12 to 20 percent and a benzene content of not more than 0.70 vol% and an olefin content of 2 to 10 vol%.

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14. A fuel according to claim 9 which has a sulfur content of not more than 25 ppmw.

15. A fuel according to claim 9 which has an aromatics content of not more than 28 vol%.